

ABSTRACT OF THE DISCLOSURE

There is provided a surface emitting semiconductor laser satisfying a requirement of making a transverse mode stable and having characteristics of high output power, low resistance, high efficiency, and high speed response and a method for manufacturing the surface emitting semiconductor laser.

Five holes are formed on the top surface of an upper multilayer reflection film formed in the shape of a post by the use of a focused ion beam (FIB) processing unit. One hole is formed on the surface of an upper multilayer reflection film corresponding to the center position of a square current injection region which is about 8  $\mu\text{m}$  square and the remaining four holes are formed at the corners of the square current injection region, for example, at the positions about 2  $\mu\text{m}$  square away from the one hole to produce four light emitting spots.